

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-3 and 15 are pending in the application. No claim amendments are presented, thus no new matter is added.

In the Office Action, Claims 1-3 are provisionally rejected on the grounds of non-statutory obviousness-type double patenting as unpatentable over co-pending Application No. 10/490,855 (herein, the ‘855 application) in view of Kondo (U.S. Pat. 7,245,774, herein the ‘774 patent); Claims 1-3 and 15 are rejected under 35 U.S.C. § 103(a) as unpatentable over Jung (U.S. Pat. 6,020,925, herein the ‘925 patent) in view of Swonger (U.S. Pat. 4,754,490, herein the ‘490 patent) and Gaffin et al. (U.S. Pat. 6,625,317, herein the ‘317 patent); and Claims 1-3 and 15 are rejected under 35 U.S.C. § 103(a) as unpatentable over Kondo (JP 11258472, herein the ‘472 patent) in view of Kondo (U.S. Pat. 5,576,772, herein the ‘772 patent), the ‘490 patent, and the ‘317 patent.

With regard to the non-statutory double patenting rejection of Claims 1-3, this rejection is respectfully traversed in light of the Terminal Disclaimer submitted herewith.

The filing of a Terminal Disclaimer to obviate a rejection based on non-statutory double patenting is not an admission of the propriety of the rejection. The “filing of a Terminal Disclaimer simply serves the statutory function of removing the rejection of double patenting, and raises neither a presumption nor estoppel on the merits of the rejection.” *Quad Environmental Technologies Corp. v. Union Sanitary District*, 946 F.2d 870, 20 USPQ2d 1392 (Fed. Cir. 1991). Accordingly, Applicants’ filing of the attached Terminal Disclaimer is provided for facilitating a timely resolution to prosecution only, and should not be interpreted as an admission as to the merits of the obviated rejection.

Accordingly, Applicants respectfully request that the provisional rejection of Claims 1-3 on the grounds of non-statutory obviousness-type double patenting be withdrawn.

In response to the above noted rejections under 35 U.S.C. § 103, Applicants respectfully submit that amended independent Claims 1-3 and 15 recite novel features clearly not taught or rendered obvious by the applied references.

Amended Claim 1, for example, recites an image processing apparatus for compressing an input image using a motion vector, the image processing apparatus comprising:

means for storing position information of each pixel of a first frame that is earlier in time than a second frame at an address corresponding to a feature value that is based on a value of said each pixel ***and a pixel peripheral to said each pixel,*** the feature value representing a feature of said each pixel...

Independent Claims 2-3 and 15, while directed to alternative embodiments, recite similar features. Accordingly, the remarks and arguments presented below are applicable to each of independent Claims 1-3 and 15.

As disclosed in an exemplary embodiment at Figs. 4-5 and p. 19, ll. 10-22 of the specification, a feature extracting unit 62 extracts a feature of a pixel (a target pixel P), which is observed for detection of a motion vector, on a frame (a current frame Fc) that is supplied from the frame memory 61. As shown in expression (2), the value of function f of the pixel values of the target pixel P and eight peripheral pixels is used as a feature.

In rejecting Claims 1-3 and 15, the Office Action concedes that none of the ‘925 patent, the ‘490 patent, the ‘472 patent, nor the ‘772 patent disclose that “the feature is based on a value of the pixel and a pixel peripheral to the pixel.”¹ In an attempt to remedy this deficiency, the Office Action relies on the ‘317 patent and asserts that all the claim elements are disclosed in the references and combining the elements from the references would have yielded predictable results. Applicants respectfully traverse this rejection as the ‘317 patent

¹ Office Action at pp. 5 and 7.

fails to disclose the claimed features for which it is asserted as a secondary reference under 35 U.S.C. § 103.

In rejecting the above noted claimed feature, the Office Action asserts that “using these pixels as the feature is well known as being within the ordinary capabilities of a person of ordinary skill in the art...” citing the abstract, Fig. 4, col. 2, ll. 23-22 (sic) and col. 3, ll. 36-47 of the ‘317 patent. However, the ‘317 patent, at no point, discloses that “a feature value is based on a value of said each pixel *and a pixel peripheral to said each pixel,*” as recited in independent Claims 1-3 and 15.

The ‘317 patent abstract describes an object recognition apparatus and method for real-time training and recognition/inspection of test objects. To train the system, digital features of an object are captured as sub-frames extracted from a data stream. The data is thresholded and digitized and used to produce an address representing the digital feature. The address is used to write a value into a memory. During recognition or inspection, extracting digital features from a test object, converting the digital features extracted from the test object into addresses, and using the addresses developed from the test object to address the memory to correlate whether the same memory locations are addressed determines whether the test object matches the reference object.

Further, col. 2 ll. 23-32 of the ‘317 patent describes that video information from a television camera is thresholded to produce a stream of binary data. The stream is saved and moved into a series of shift registers in order to extract sub-frames (e.g., a sub-frame may include a five pixel by five pixel region of the binary stream). The sub-frames represent a small moving region of interest extracted from the binary data stream. Binary information from each sub-frame is used (directly or after hashing) to address a large random access memory.

Col. 3, ll. 36-47 of the ‘317 patent describes that each digital feature from feature capture apparatus 110 is provided to mapper 115. Mapper 115 translates the digital features into memory addresses used to store a value into memory 120. The particular translation mechanism as well as the particular value stored into memory 120 are dependent upon an operational mode and embodiment of imaging system 100.

Thus, the ‘317 patent merely describes extracting and storing digital features into memory addresses, but fails to teach or suggest the use of “a feature value that is based on a value of said each pixel *and a pixel peripheral to said each pixel,*” as recited in independent Claims 1-3 and 15. More particularly, the ‘317 patent fails to disclose that a feature value is based on a pixel and a pixel peripheral to the pixel, as claimed.

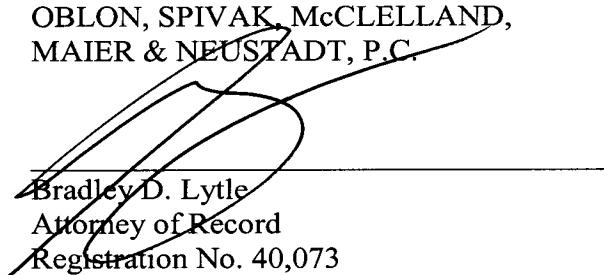
Therefore, the applied references, neither alone, nor in combination, teach or suggest an image processing apparatus for compressing an input image using a motion vector, the image processing apparatus “storing position information of each pixel of a first frame that is earlier in time than a second frame at an address corresponding to *a feature value that is based on a value of said each pixel and a pixel peripheral to said each pixel,* the feature value representing a feature of said each pixel...,” as recited in independent Claims 1-3 and 15.

Accordingly, for at least the reasons discussed above, Applicants respectfully request that the rejections of Claims 1-3 and 15 under 35 U.S.C. § 103 be withdrawn.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-3 and 15 is patentably distinguishing over the applied references. The present application is therefore believed to be in condition for allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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